

STATE OF MAINE DEPARTMENT OF TRANSPORTATION



SPECIFICATIONS

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Eighth Edition 2017.

DESIGN LOADING

Live Load (Bridge Deck) HL - 93 Modified

TRAFFIC DATA

Current (2018) AADT 9,710
 Future (2038) AADT 10,680
 DHV - % of AADT 10%
 Design Hour Volume 1,068
 Heavy Trucks (% of AADT) 15%
 Heavy Trucks (% of DHV) 15%
 Directional Distribution (% of DHV) 57%
 18 kip Equivalent P 2.0 1611
 18 kip Equivalent P 2.5 1534
 Design Speed (mph) 40

MATERIALS

Concrete:
 Joints, Curbs, Transition Barrier Class "LP"
 All Other Class "A"

Reinforcing Steel:
 Plain ASTM A 615/A 615M, Grade 60
 Stainless ASTM A 955, Grade 75

BASIC DESIGN STRESSES

Concrete:
 Class "LP" $f'c = 5,000$ psi
 Class "A" $f'c = 4,000$ psi

Reinforcing Steel:
 Plain $f_y = 60,000$ psi
 Stainless $f_y = 75,000$ psi

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WILTON FRANKLIN COUNTY WILSON STREAM BRIDGE OVER WILSON STREAM ROUTE 2\4 PROJECT NO. STP - 2189(800) PROJECT LENGTH 0.024 mi. BRIDGE NO. 5936

UTILITIES

None

MAINTENANCE OF TRAFFIC

Maintain one 12'-0" wide lane of alternating one-way traffic using temporary traffic signals.

<u>PROJECT LOCATION</u>	US Route 2 & ME Route 4 over Wilson Stream in Wilton, 0.25 Miles East of Cemetery Road. Latitude 44°36'53" N, Longitude 70°11'10" W
<u>PROGRAM AREA</u>	Bridge Program
<u>OUTLINE OF WORK</u>	Deck Replacement

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	APPROVED	DATE
COMMISSIONER:	[Signature]	7/16/18
CHIEF ENGINEER:	[Signature]	7-16-18

STATE OF MAINE PROFESSIONAL ENGINEERS	SIGNATURE	P.E. NUMBER	DATE
[Signature]	10423	6/27/18	[Date]

PROJECT INFORMATION	BRIDGE
PROGRAM	M. Wight
PROJECT MANAGER	K. Wood
DESIGNER	Kreinfeiler
CONSULTANT	[Blank]
PROJECT RESIDENT	[Blank]
CONTRACTOR	[Blank]
PROJECT COMPLETION DATE	[Blank]

STP-2189(800) WIN 21898.00

WILTON
WILSON STREAM BRIDGE
TITLE SHEET

SHEET NUMBER
1
OF 15

Date: 6/25/2018
User name:
Division: BRIDGE
Filename: \WSTA\001_Title - Firol.dgn

Date: 7/12/2018

Username:

Division: BRIDGE

Filename: ... \BRIDGE\WSTA\002_Notes.dgn

ESTIMATED QUANTITIES				
ITEM NO.	DESCRIPTION	QUANTITY	UNIT	
202.10	REMOVING EXISTING SUPERSTRUCTURE (PROPERTY OF CONTRACTOR)	(160 CY)	1	LS
202.202	REMOVING PAVEMENT SURFACE		690	SY
203.20	COMMON EXCAVATION		165	CY
203.24	COMMON BORROW		10	CY
304.14	AGGREGATE BASE COURSE - TYPE A		150	CY
403.2081	HOT MIX ASPHALT, 12.5 MM NOMINAL MAXIMUM SIZE (POLYMER MODIFIED)		120	T
403.213	HOT MIX ASPHALT, 12.5 MM NOMINAL MAXIMUM SIZE (BASE COURSE)		40	T
403.2131	HOT MIX ASPHALT, 12.5 MM NOMINAL MAXIMUM SIZE (BASE COURSE, POLYMER MODIFIED)		120	T
409.15	BITUMINOUS TACK COAT APPLIED		82	GAL
502.26	CONCRETE ROADWAY & SIDEWALK SLAB ON STEEL BRIDGE	(119 CY)	1	LS
502.49	STRUCTURAL CONCRETE CURBS AND SIDEWALKS	(16 CY)	1	LS
503.26	STAINLESS STEEL REINFORCEMENT - FABRICATED AND DELIVERED		3100	LB
503.27	STAINLESS STEEL REINFORCEMENT - PLACING		3100	LB
505.08	SHEAR CONNECTORS	(2390 EA)	1	LS
507.0821	STEEL BRIDGE RAILING, 3 BAR	(235 LF)	1	LS
508.14	HIGH PERFORMANCE WATERPROOFING MEMBRANE	(470 SY)	1	LS
514.06	CURING BOX FOR CONCRETE CYLINDERS		1	EA
515.21	PROTECTIVE COATING FOR CONCRETE SURFACES	(160 SY)	1	LS
520.22	EXPANSION DEVICE - COMPRESSION SEAL		2	EA
526.301	TEMPORARY CONCRETE BARRIER, TYPE 1	(120 LF)	1	LS
526.305	TEMPORARY CONCRETE BARRIER, BRACED TYPE 1	(130 LF)	1	LS
526.34	PERMANENT CONCRETE TRANSITION BARRIER		4	EA
527.34	WORK ZONE CRASH CUSHIONS		2	UN
606.1301	3" W-BEAM GUARDRAIL - MID-WAY SPLICE		375	LF
606.1307	BRIDGE TRANSITION (ASYMMETRICAL) - TYPE 1		4	EA
613.319	EROSION CONTROL BLANKET		10	SY
615.07	LOAM		9	CY
618.14	SEEDING METHOD NUMBER 2		2	UN
619.12	MULCH		2	UN
619.14	EROSION CONTROL MIX		18	CY
627.733	4 INCH WHITE OR YELLOW PAVEMENT MARKING LINE		1250	LF
627.77	REMOVING PAVEMENT MARKINGS		400	SF
627.78	TEMPORARY PAVEMENT MARKING LINE, WHITE OR YELLOW		2130	LF
629.05	HAND LABOR STRAIGHT TIME		20	HR
631.12	ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)		20	HR
631.172	TRUCK - LARGE (INCLUDING OPERATOR)		20	HR
639.19	FIELD OFFICE - TYPE B		1	EA
643.72	TEMPORARY TRAFFIC SIGNAL		1	LS
652.312	TYPE III BARRICADES		5	EA
652.33	DRUM		35	EA
652.34	CONE		35	EA
652.35	CONSTRUCTION SIGNS		300	SF
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES	(120 CD)	1	LS
652.38	FLAGGERS		160	HR
652.41	PORTABLE - CHANGEABLE MESSAGE SIGN		4	EA
656.75	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL		1	LS
659.10	MOBILIZATION		1	LS

GENERAL CONSTRUCTION NOTES

1. All aluminum bridge rail, rail posts, and associated hardware which are to be removed shall be carefully salvaged by the Contractor and will remain the property of the Department. Payment will be considered incidental to related Contract items.

2. Do not excavate for Aggregate Subbase Course where existing material is suitable as determined by the Resident.

3. In areas where the Resident directs the Contractor not to excavate to the subgrade line shown on the plans, payment for removing existing pavement, grubbing, shaping, ditching, and compacting the existing subbase and layers of new subbase 6 inches or less thick will be made under appropriate equipment rental items.

4. Place loam 2 inches deep on all new or reconstructed sideslopes or as directed by the Resident.

5. Erosion Control Mix may be substituted in those areas normally receiving loam and seed as directed by the Resident. Placement shall be in accordance with Standard Specifications Section 619, Mulch. Payment will be made under Item No. 619.14, Erosion Control Mix.

6. Place a 24-in. wide strip of Temporary Erosion Control Blanket on the sideslopes along the top of the riprap and behind the wingwalls.

7. Extended-use Erosion Control Blanket, seeded gutters, riprap downspouts, and other gutters lined with Stone Ditch Protection shall be constructed after paving and shoulder work is completed, where it is apparent that runoff will cause continual erosion. Payment will be made under the appropriate Contract items.

8. Protective Coating for Concrete Surfaces shall be applied to the following areas:

- All exposed surfaces of concrete curbs, Fascias down to the drip notch, All exposed surfaces of Concrete Transition Barriers, Top of abutment backwalls and to one foot below the top of backwalls on the back side, Headers at pier Joints.

9. Project information referred to below may be accessed at the following MaineDOT web address: <http://www.maine.gov/mdot/contractors/>.

10. The existing bridge plans may be accessed at the MaineDOT web address. The plans are reproductions of the original drawings as prepared for the construction of the bridge. It is very unlikely that the plans will show any construction field changes or any alterations which may have been made to the bridge during its life span.

11. Quantities included for pay items measured and paid for by Lump Sum are estimated quantities and are provided by MaineDOT for informational purposes only. Lump Sum pay items will be paid for at the Contract Bid amount, with no addition or reduction in payment to the Contractor if the actual final quantities are different from the MaineDOT provided estimated quantities, except as follows:

- a. If a Lump Sum pay item is eliminated, the requirements of Standard Specifications Section 109.2, Elimination of Items, will take precedence.
- b. If other Contract Documents specifically allow a change in payment for a Lump Sum pay item, those requirements will be followed.
- c. If a design change results in changes to estimated quantities for Lump Sum pay items, price adjustments will be made in accordance with Standard Specifications Section 109.7, Equitable Adjustments to Compensation.

12. The Contractor shall submit a Deck Demolition Plan to the Resident at least 10 business days prior to the start of demolition work. The plan shall outline the methods and equipment to be used to remove and dispose of all materials included in the existing bridge. No work related to the removal of the deck shall be undertaken by the Contractor until MaineDOT has reviewed the Deck Demolition Plan for appropriateness and completeness. Payment for all work necessary for developing, submitting, and finalizing the Demolition Plan will be considered incidental to the superstructure removal pay item. The Contractor shall take extreme care in removing the existing deck and provide measures for temporary support of the deck, if necessary, to support traffic during Stage I. The Contractor shall prepare and submit detailed Working Drawings for review that include deck removal, sequence of construction, and support of Stage I traffic including temporary support (if required). The Working Drawings shall include plans and calculations designed by a Professional Engineer licensed in the State of Maine. Any damaged beams or plates shall be repaired as directed by the Resident at no expense to the Department.

13. Steel portions of the existing bridge may be coated with a lead-based paint system. Portions of the existing paint system may need to be removed in order to remove existing drains, attach the new bridge drains to the existing beams, and cleaning the top flanges. The Contractor is responsible for the containment, proper management, and disposal of all lead-contaminated hazardous waste generated by their work. The Contractor is responsible for implementing appropriate OSHA mandated personal protection standards related to this process. Payment for this work will not be made separately, but will be considered incidental to related contract items.

14. Proposed bridge drains and drain support, including the connection to the existing girders are considered incidental to item 502.26.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP-2189(800)
WIN
BRIDGE NO. 5936
21898.00
BRIDGE PLANS

DATE: 6/2018
SIGNATURE: T. WOLFEL
P.E. NUMBER: W. BROWN
DATE: 6/2018

PROJ. MANAGER: M. WIGHT
DESIGN-DETAILED: E. WALTON
CHECKED-REVIEWED: T. WOLFEL
DESIGN-DETAILED: K. WOOD
REVISIONS 1
REVISIONS 2
REVISIONS 3
REVISIONS 4
FIELD CHANGES

WILSON STREAM BRIDGE
WILSON STREAM
FRANKLIN COUNTY
WILTON
ESTIMATED QUANTITIES
& GENERAL NOTES

SHEET NUMBER

2

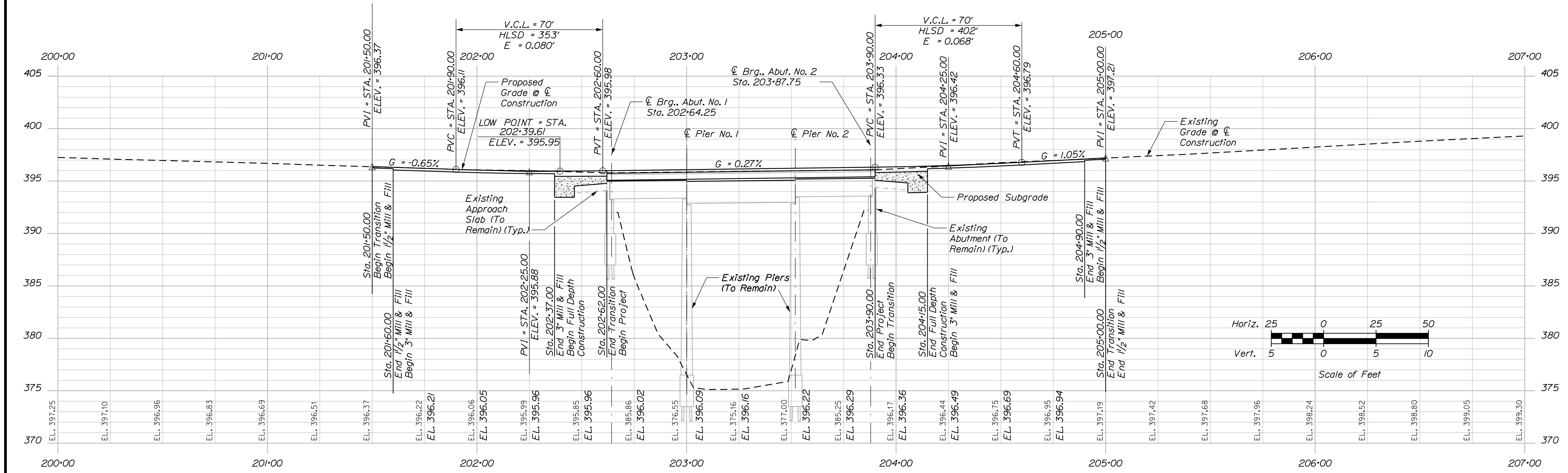
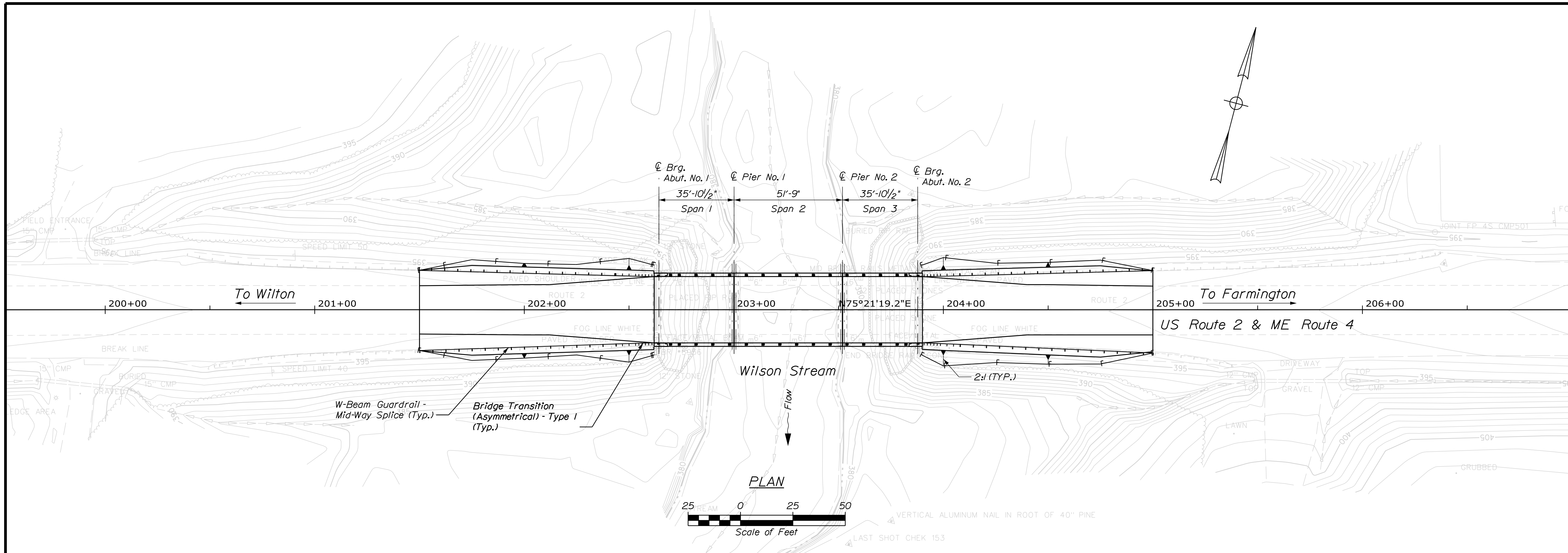
OF 15

Date: 6/25/2018

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Division: BRIDGE

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PROFILE

STATE OF MAINE DEPARTMENT OF TRANSPORTATION		STP-2189(800)	
BRIDGE NO. 6936		WIN 21898.00	
BRIDGE PLANS			
PROJ. MANAGER	M. WIGHT	DATE	DATE
DESIGN-DETAILED	K. WOOD	6/2018	6/2018
CHECKED-REVIEWED	W. BROWN		
DESIGNS-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			
WILSON STREAM BRIDGE WILSON STREAM FRANKLIN COUNTY		SIGNATURE	
WILTON		P.E. NUMBER	
GENERAL PLAN & PROFILE		DATE	
SHEET NUMBER			
3			
OF 15			

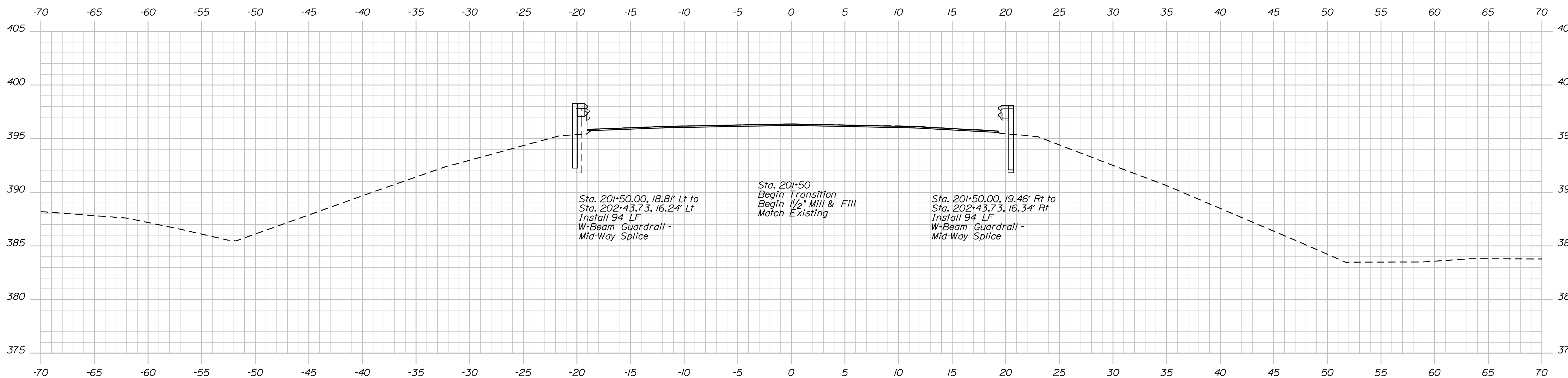
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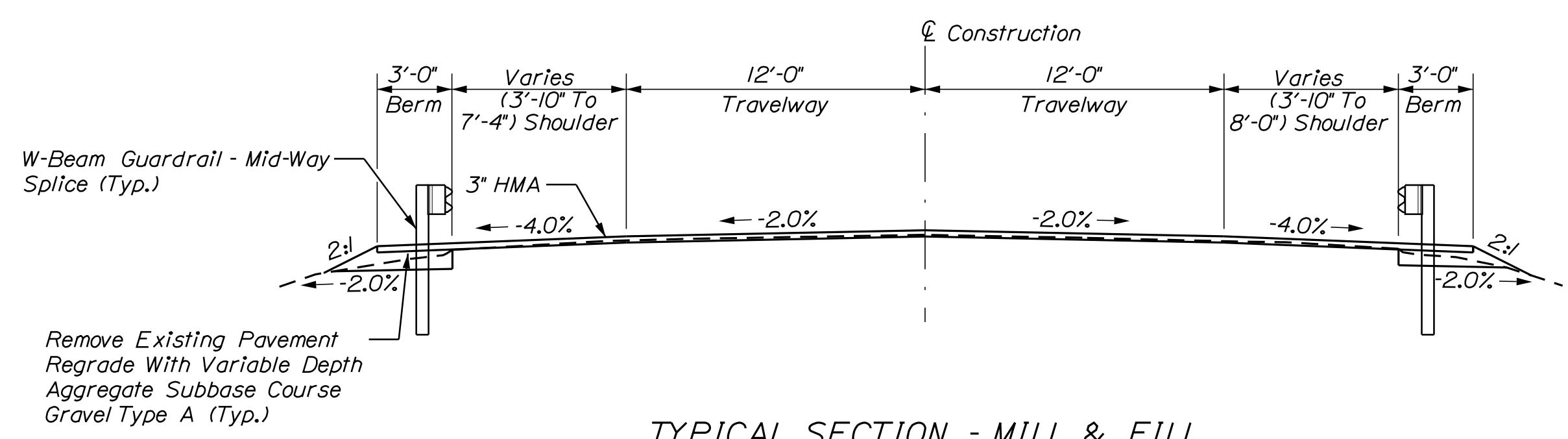
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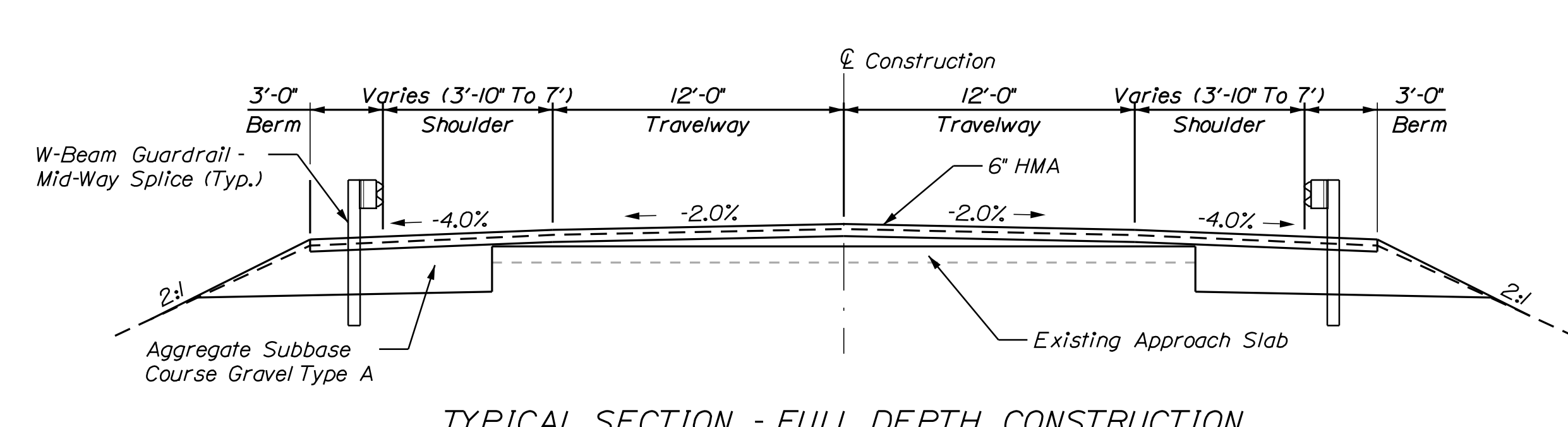
STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION
 STP-2189(800)
 WIN
 21898.00
 BRIDGE NO. 5936
 BRIDGE PLANS



201+50.00



TYPICAL SECTION - MILL & FILL



TYPICAL SECTION - FULL DEPTH CONSTRUCTION

Normal Crown

NOTES:
 1. Do not remove existing approach slab. Place 24\"/>

DESIGN/DATE	6/2018
CHECKED/REVIEWED	T. WOLFEL / K. WOOD
DESIGNED/DETAILED	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

PROJ. MANAGER	M. WIGHT
BY	T. WOLFEL / K. WOOD
DATE	6/2018
SIGNATURE	
P.E. NUMBER	
DATE	

WILSON STREAM BRIDGE
 WILSON STREAM
 FRANKLIN COUNTY
 WILTON
 CROSS SECTIONS

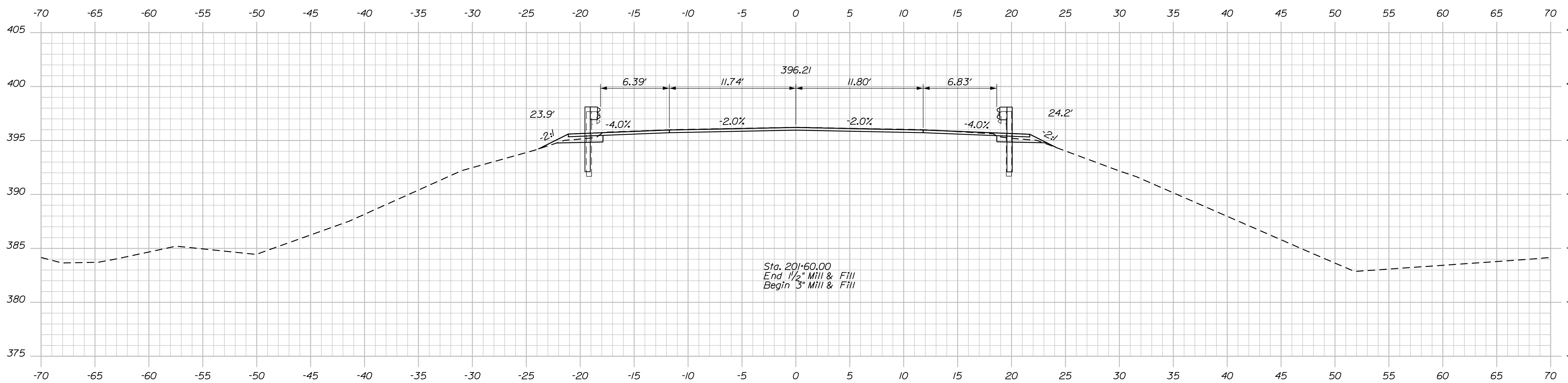
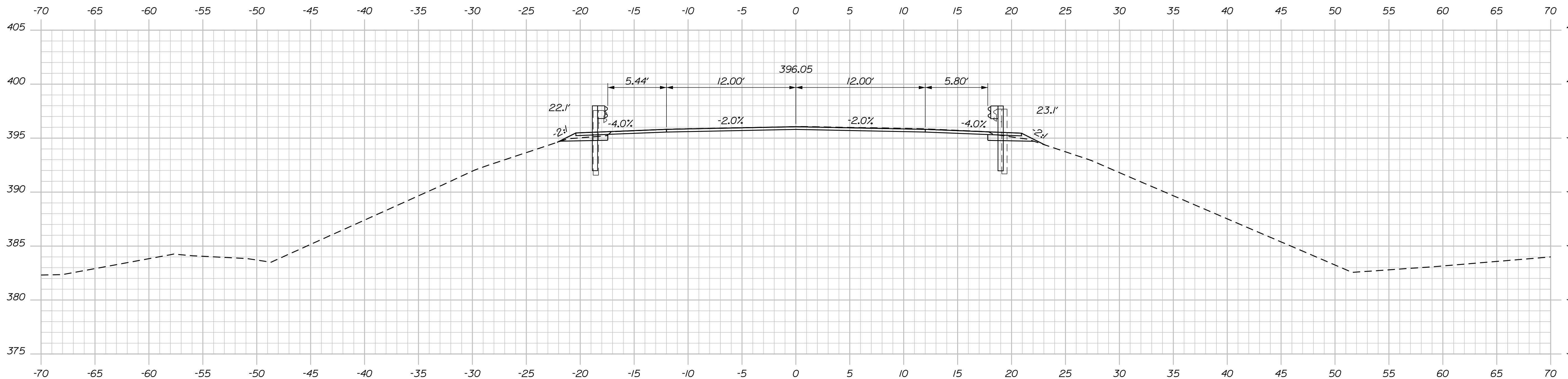
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Date: 6/25/2018

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Division: BRIDGE

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DEPARTMENT OF TRANSPORTATION
STP-2189(800)
BRIDGE NO. 5936
WIN
21898.00
BRIDGE PLANS

SIGNATURE
P.E. NUMBER
DATE

PROJ. MANAGER	M. WIGHT	BY	DATE
DESIGN DETAILED	T. WOLFEL	T. WOLFEL	6/2018
CHECKED-REVIEWED	W. BROWN	K. WOOD	6/2018
DESIGN DETAILED			
REVISIONS 1			
REVISIONS 2			
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REVISIONS 4			
FIELD CHANGES			

WILSON STREAM BRIDGE
WILSON STREAM
FRANKLIN COUNTY
WILTON
CROSS SECTIONS

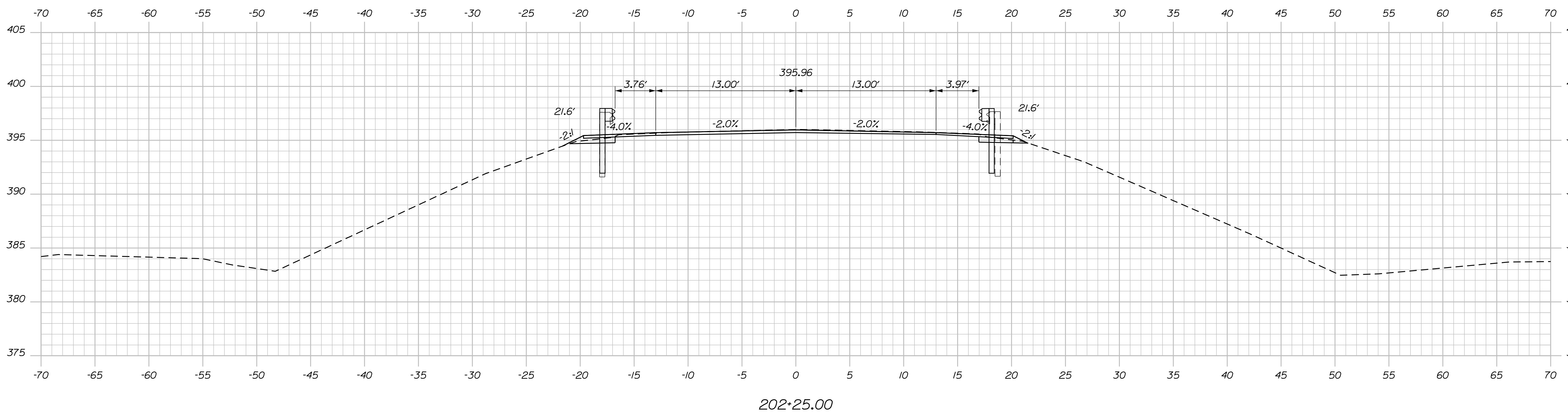
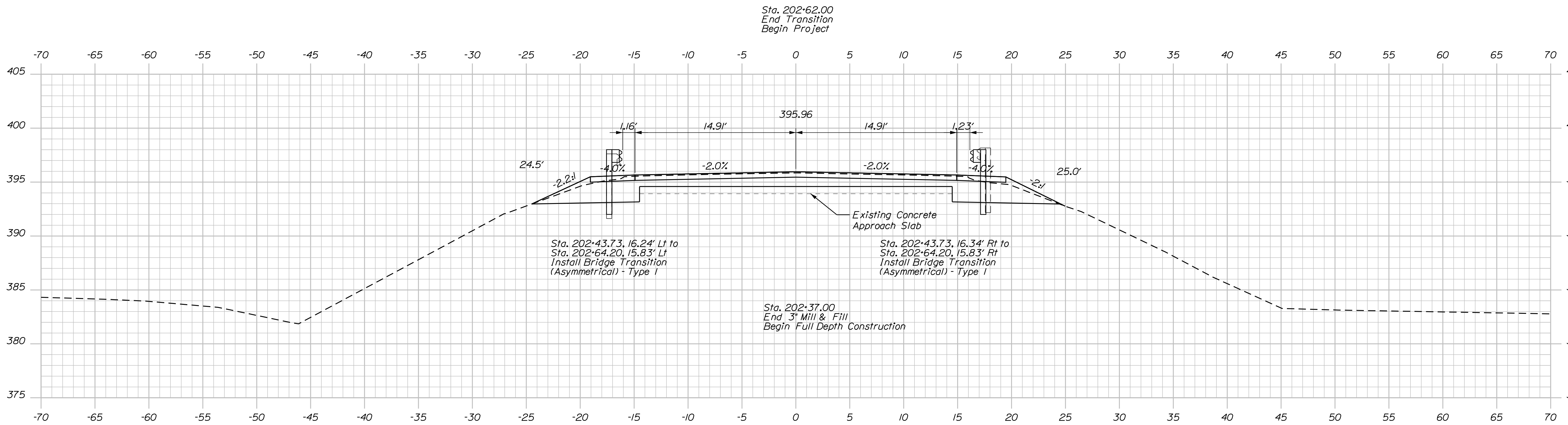
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OF 15

Date: 6/25/2018

Username:

Division: BRIDGE

Filename: ... \BRIDGE\MSTA\004-009_xsect.dgn



STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION
 STP-2189(800)
 WIN
 21898.00
 BRIDGE NO. 5936
 BRIDGE PLANS

DESIGN: T. WOLFEL
 CHECKED: W. BROWN
 DATE: 6/2018
 BY: T. WOLFEL, K. WOOD
 M. WIGHT
 P.E. NUMBER
 DATE

PROJ. MANAGER	DATE
DESIGN: T. WOLFEL	6/2018
CHECKED: W. BROWN	6/2018
DESIGN: T. WOLFEL	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

WILSON STREAM BRIDGE
 WILSON STREAM
 FRANKLIN COUNTY
 WILTON
 CROSS SECTIONS

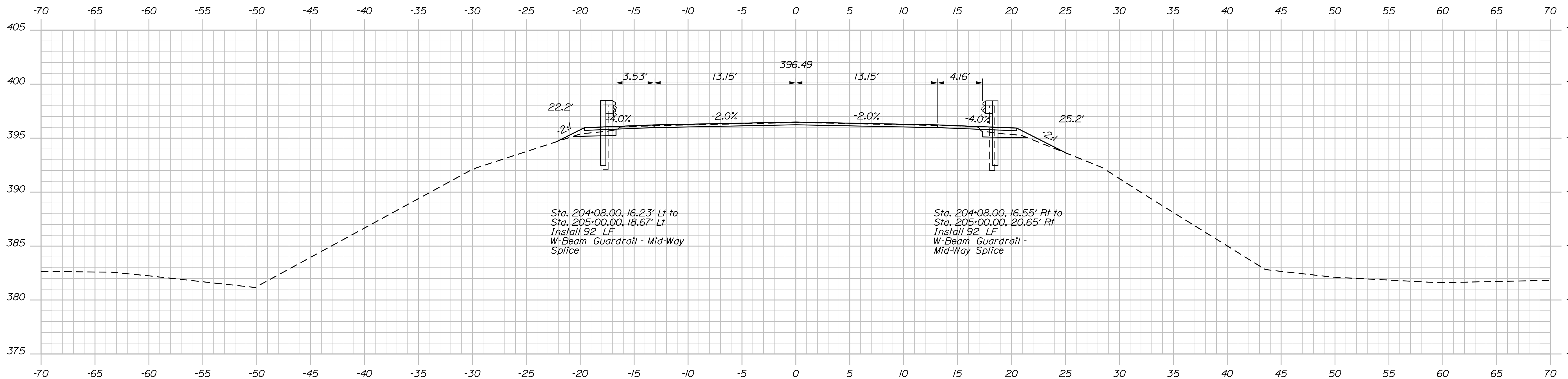
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Date: 6/25/2018

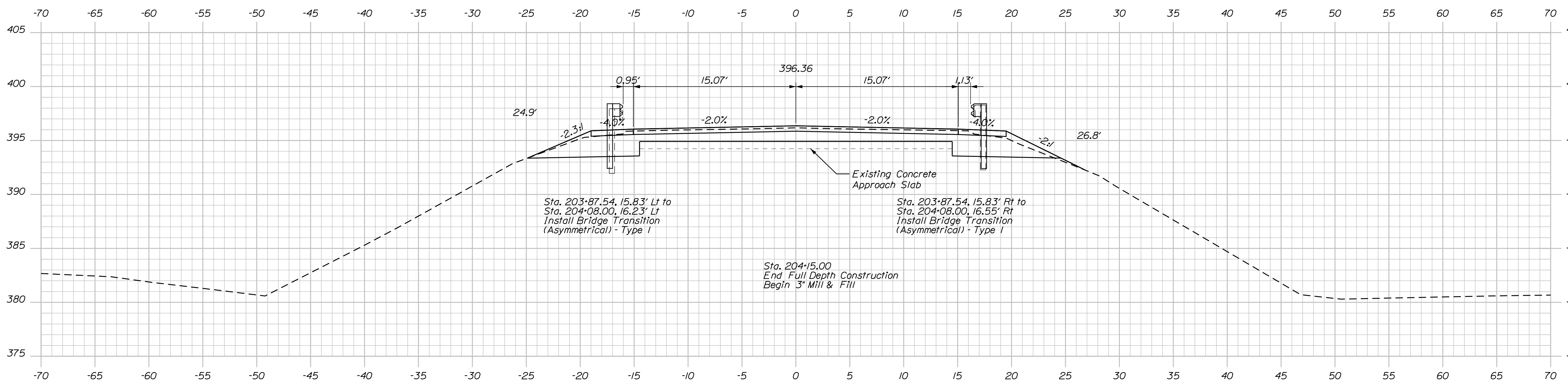
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204+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP-2189(800)

BRIDGE NO. 5936
WIN
21898.00
BRIDGE PLANS

PROJ. MANAGER	M. WIGHT	BY	DATE
DESIGN-DETAILED	T. WOLFEL	T. WOLFEL	6/2018
CHECKED-REVIEWED	W. BROWN	K. WOOD	6/2018
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

WILSON STREAM BRIDGE
WILSON STREAM
FRANKLIN COUNTY
WILTON
CROSS SECTIONS

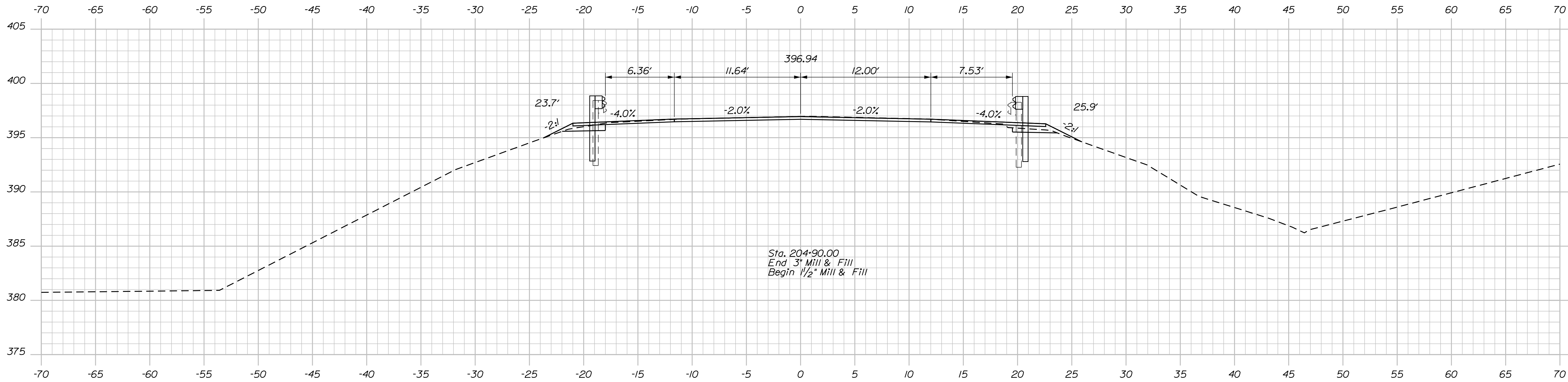
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OF 15

Date: 6/25/2018

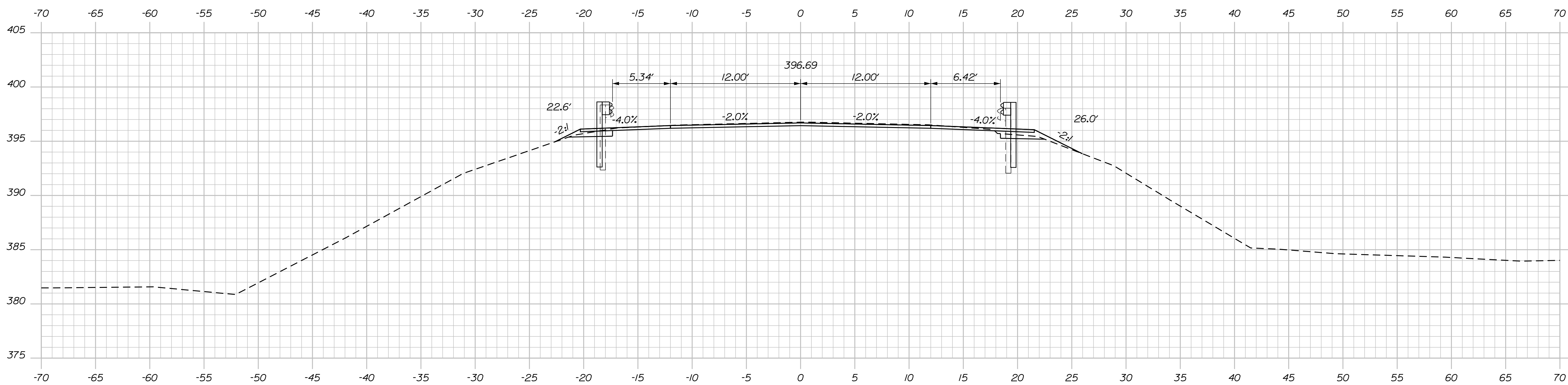
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204+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP-2189(800)

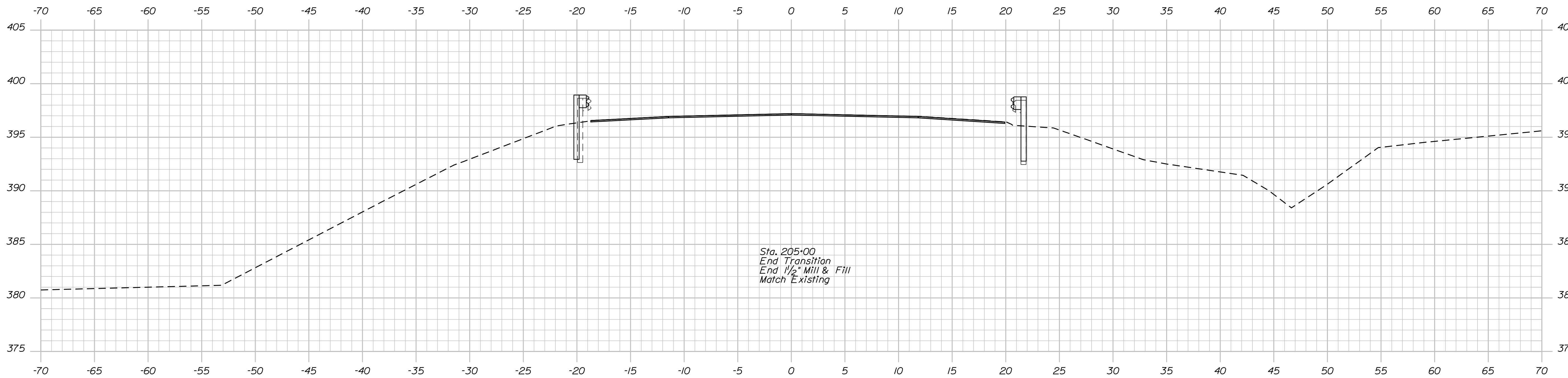
BRIDGE NO. 5936
WIN
21898.00
BRIDGE PLANS

PROJ. MANAGER	M. WIGHT	BY	DATE
DESIGN-DETAILED	T. WOLFEL	T. WOLFEL	6/2018
CHECKED-REVIEWED	W. BROWN	K. WOOD	6/2018
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

WILSON STREAM BRIDGE
WILSON STREAM
FRANKLIN COUNTY
WILTON

CROSS SECTIONS

SHEET NUMBER
8
OF 15



205+00.00

STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION
STP-2189(800)
 BRIDGE NO. 5936
 WIN
 21898.00
 BRIDGE PLANS

PROJ. MANAGER	M. WIGHT	DATE
DESIGN-DETAILED	T. WOLFEL	6/2/2018
CHECKED-REVIEWED	T. WOLFEL	6/2/2018
DESIGN-DETAILED	K. WOOD	
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE	
P.E. NUMBER	
DATE	

WILSON STREAM BRIDGE
 WILSON STREAM
 FRANKLIN COUNTY
 WILTON
CROSS SECTIONS

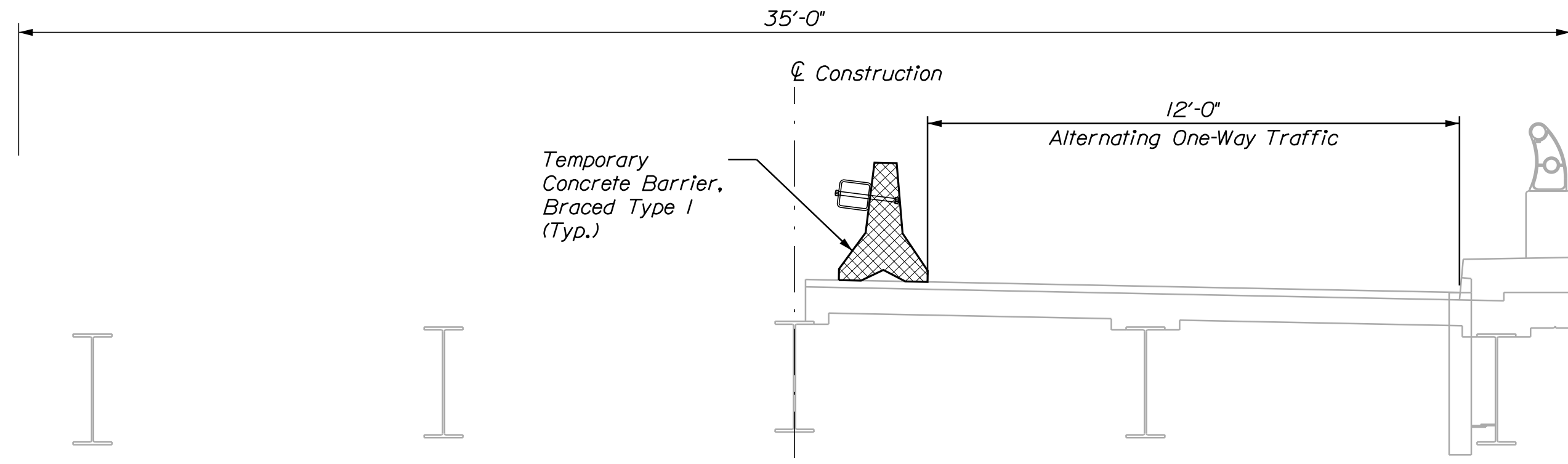
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 OF 15

Date: 7/2/2018

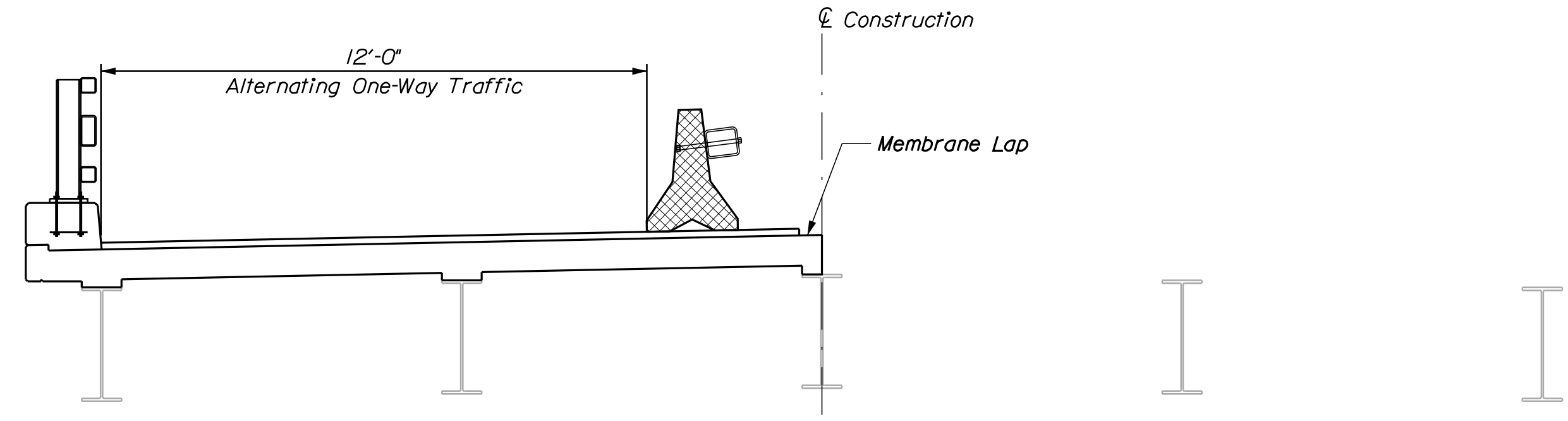
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Division: BRIDGE

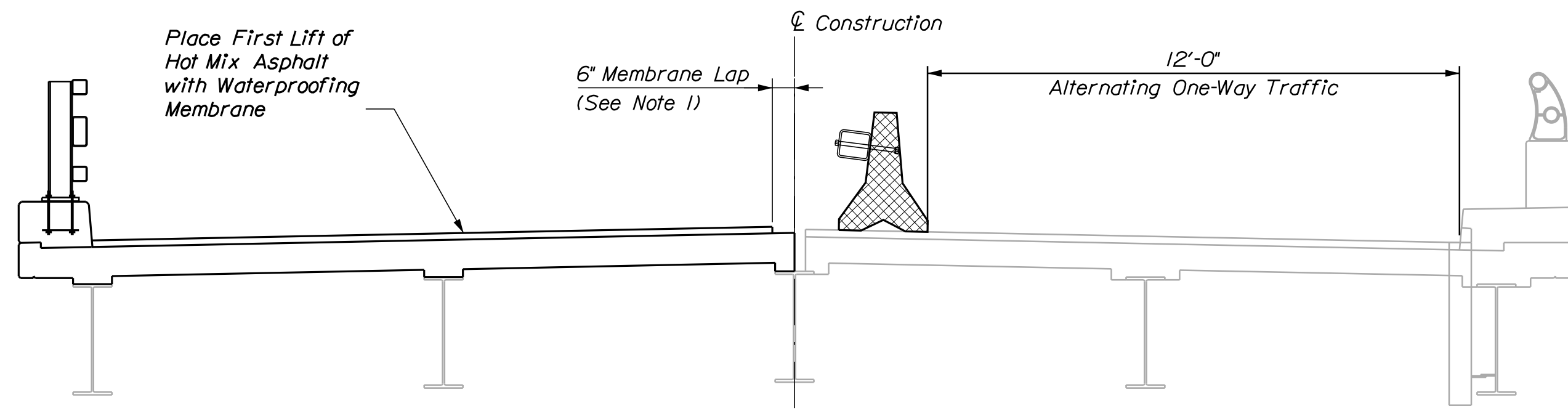
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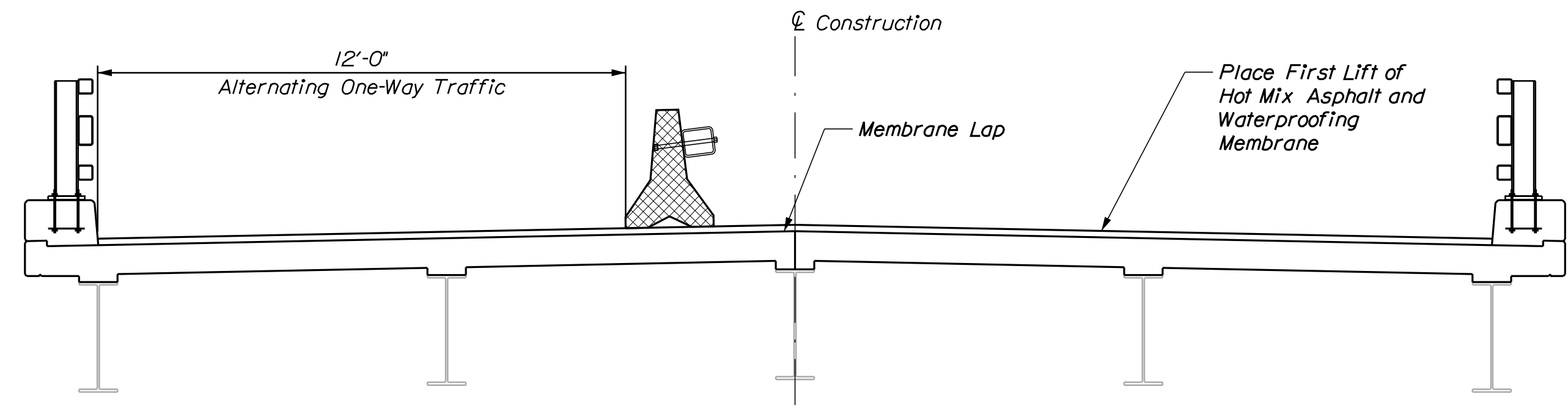
STAGE 1A
Demolish Half of Existing Deck



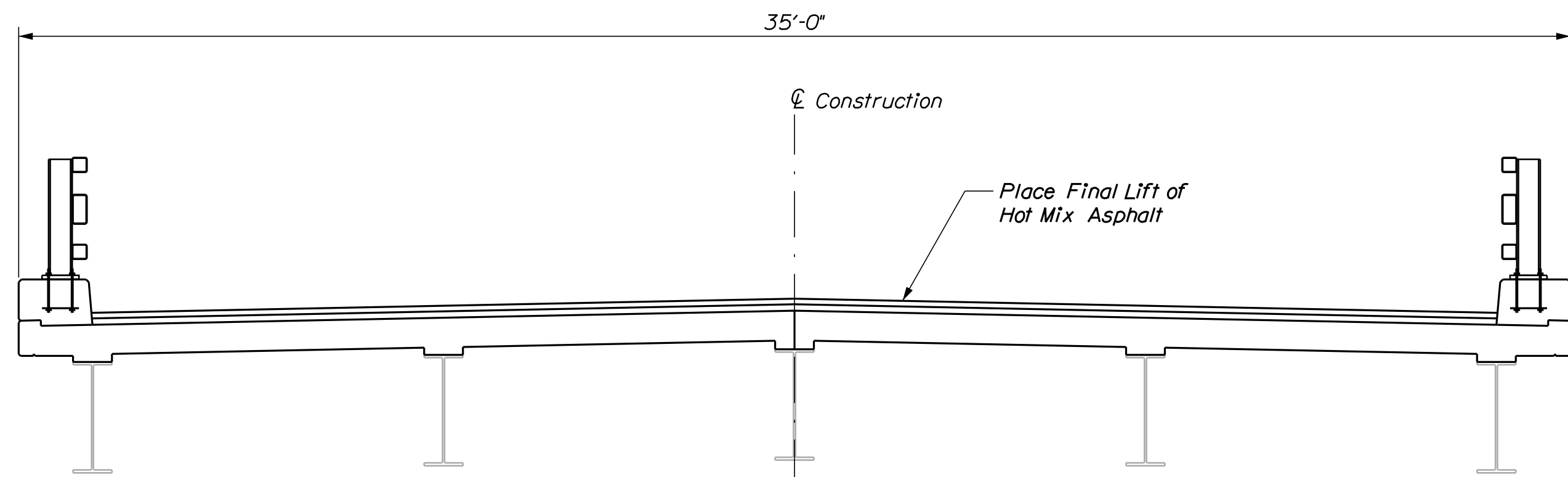
STAGE 2A
Demolish Remaining Half of Existing Deck



STAGE 1B
Construct Half of New Deck



STAGE 2B
Construct Half of New Deck



STAGE 3
Place Final Lift of Pavement

STAGE CONSTRUCTION NOTES

1. The location of the membrane lap is conceptual. The final location of 6" membrane lap to be coordinated with and approved by the Resident.
2. Before traffic is switched over onto the base pavement of the partially completed first stage, temporary pavement ramps shall be provided by the Contractor around the new bridge drain and joints. Pavement transitions shall meet the following criteria:
 - For speed limits under 50 MPH: taper length of 4 feet per inch of transition depth
 - For speed limits of 50 MPH or more: taper length of 8 feet per inch of transition depth

Temporary pavement ramps will not be paid for separately, but considered incidental to related Contract items.

STATE OF MAINE
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STP-2189(800)
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BRIDGE NO. 6936
BRIDGE PLANS

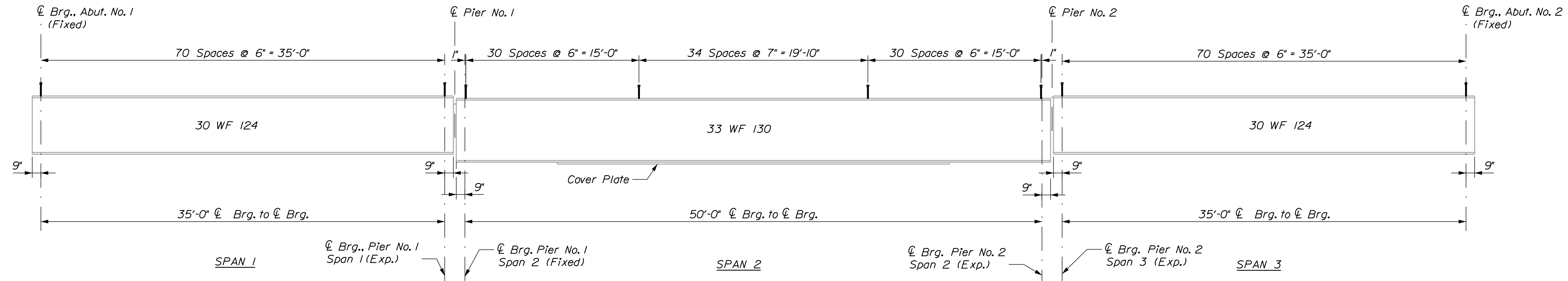
PROJ. MANAGER	M. WIGHT	BY	DATE
DESIGN-DETAILED	K. WOOD	D. BLODFAU	6/2018
CHECKED-REVIEWED	W. BROWN	K. WOOD	6/2018
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

WILSON STREAM BRIDGE
WILSON STREAM
FRANKLIN COUNTY
WILTON
STAGED CONSTRUCTION

SHEET NUMBER
10
OF 15

SHEAR CONNECTOR NOTES

1. Existing stud shear connectors on Span 2, only, may remain unless they conflict with the installation of the new shear connectors or any other work. If the existing stud shear connectors on Span 2 interfere with installation of the new shear connectors or any other work, they shall be removed completely and ground flush with the top flange. All costs associated with this work shall be incidental to related contract items.

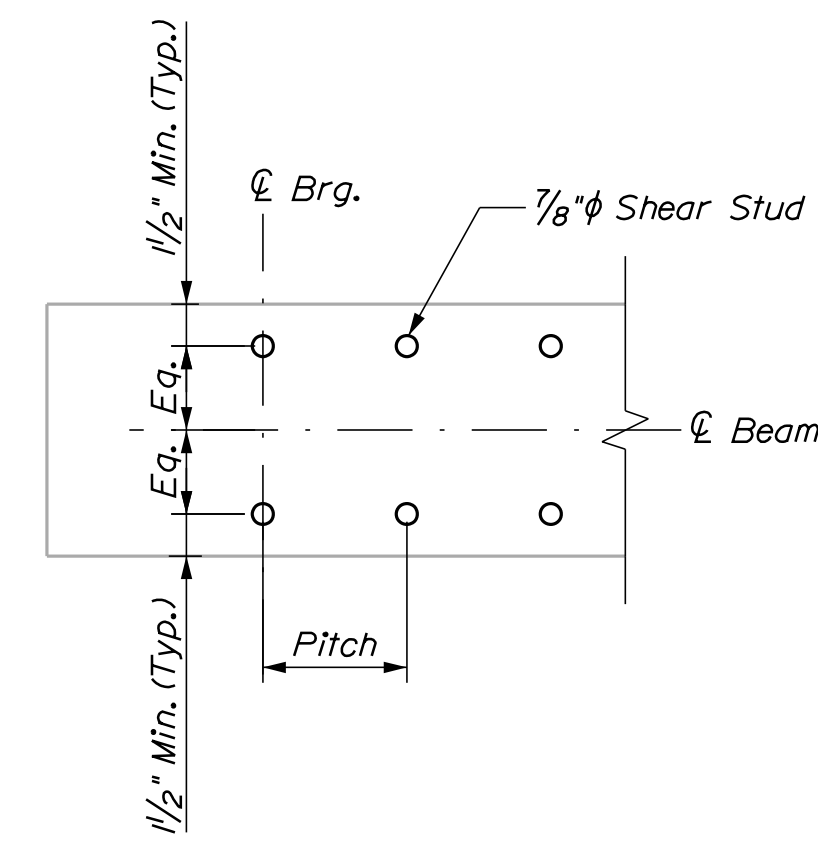


SHEAR CONNECTOR LAYOUT ~ INTERIOR & EXTERIOR BEAMS
 Double Studs ~ 478 Studs per Beam Line (5) = 2,390 Studs

BOTTOM OF SLAB ELEVATIONS						
		Span No. 1				
Beam	℄ Brg., Abut. No. 1	+7.0'	+14.0'	+21.0'	+28.0'	℄ Brg., Pier. No. 1 Span 1
1	394.73	394.76	394.79	394.80	394.82	394.83
2	394.89	394.92	394.95	394.97	394.98	394.99
3	395.05	395.08	395.11	395.12	395.14	395.15
4	394.89	394.92	394.95	394.97	394.98	394.99
5	394.73	394.76	394.79	394.80	394.82	394.83

BOTTOM OF SLAB ELEVATIONS						
		Span No. 2				
Beam	℄ Brg., Pier. No. 1 Span 2	+10.0'	+20.0'	+30.0'	+40.0'	℄ Brg., Pier. No. 2 Span 2
1	394.83	394.89	394.93	394.95	394.97	394.97
2	394.99	395.05	395.09	395.12	395.13	395.13
3	395.15	395.21	395.25	395.28	395.29	395.29
4	394.99	395.05	395.09	395.12	395.13	395.13
5	394.83	394.89	394.93	394.95	394.97	394.97

BOTTOM OF SLAB ELEVATIONS						
		Span No. 3				
Beam	℄ Brg., Pier. No. 2 Span 3	+7.0'	+14.0'	+21.0'	+28.0'	℄ Brg., Abut. No. 2
1	394.97	395.00	395.02	395.04	395.06	395.07
2	395.13	395.16	395.19	395.21	395.22	395.23
3	395.29	395.32	395.34	395.36	395.38	395.38
4	395.13	395.16	395.19	395.21	395.22	395.23
5	394.97	395.00	395.02	395.04	395.06	395.07



SHEAR CONNECTOR DETAIL

STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION
STP-2189(800)
 WIN
 21898.00
 BRIDGE NO. 6936
 BRIDGE PLANS

PROJ. MANAGER
 M. WIGHT
 DESIGN-DETAILED
 K. WOOD
 CHECKED-REVIEWED
 W. BROWN
 DESIGNS-DETAILED
 REVISIONS 1
 REVISIONS 2
 REVISIONS 3
 REVISIONS 4
 FIELD CHANGES

DATE
 6/2018
 6/2018

BY
 D. BLONDEAU
 K. WOOD

SIGNATURE
 P.E. NUMBER
 DATE

WILSON STREAM BRIDGE
 WILSON STREAM
 FRANKLIN COUNTY
 WILTON

STRUCTURAL STEEL

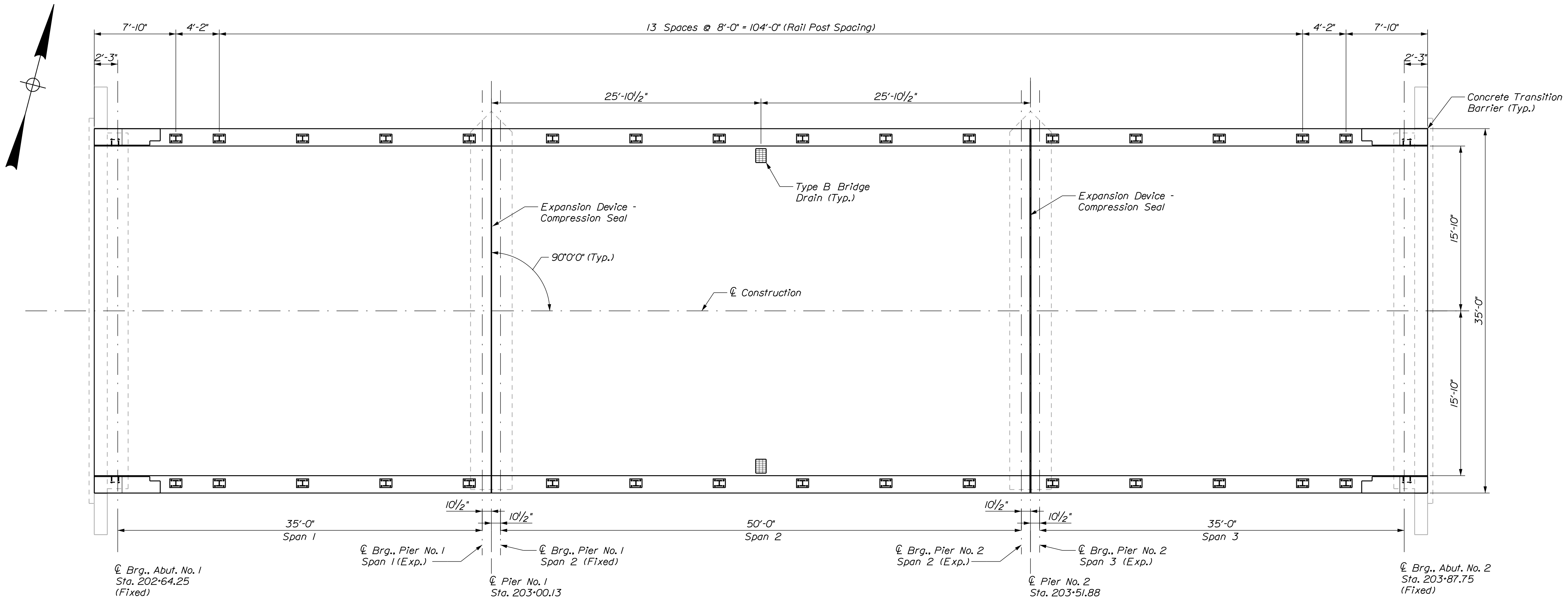
SHEET NUMBER
11
 OF 15

Date: 6/25/2018

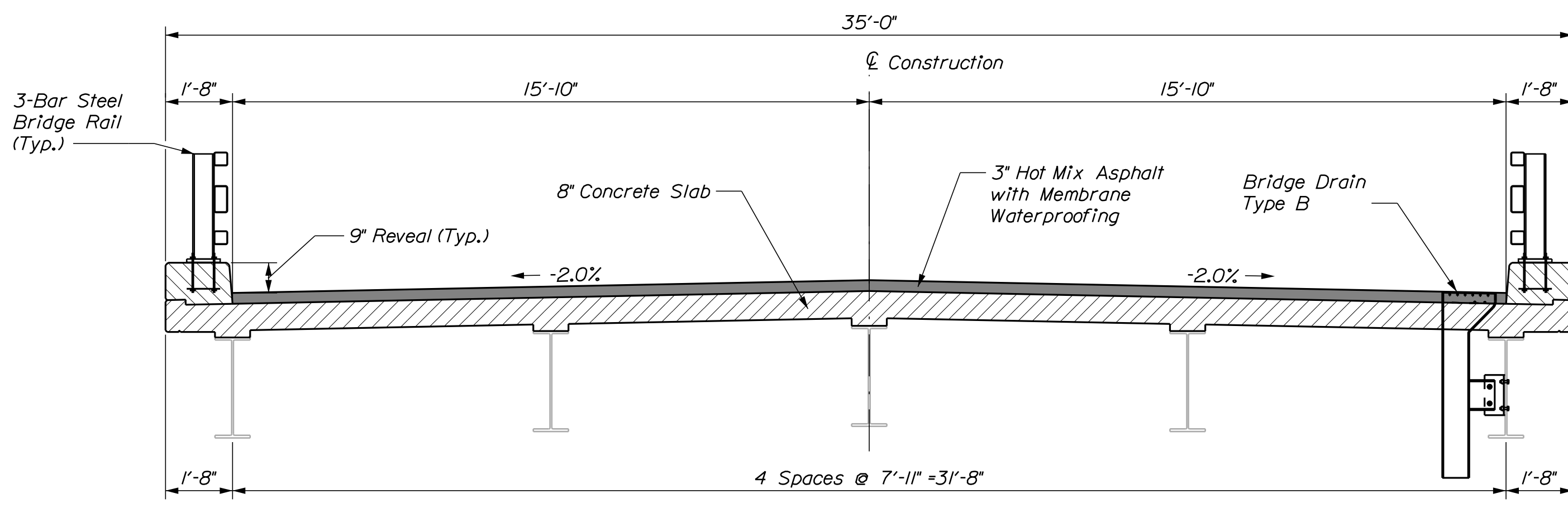
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Division: BRIDGE

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SUPERSTRUCTURE PLAN



PROPOSED BRIDGE SECTION

SUPERSTRUCTURE NOTES

- The theoretical blocking used for design of the structure is 1 inch at the centerline of bearing of the abutments and piers for spans 1 and 3 and 2/4 inches at the centerline of bearings for span 2.
- Reinforcing steel shall have a minimum concrete cover of 2 inches unless otherwise noted.
- Adjust reinforcing steel to fit around the bridge drains in a manner approved by the Resident.
- Form a one inch V-groove on the fascias at the horizontal joint between the curb and slab.
- The superstructure slab concrete for each span shall be placed continuously and shall be kept plastic until the entire placement has been made.
- The formwork and its supports, over the full width of the structural slab, shall remain in place until a minimum of 48 hours has elapsed after placement of the final section of the slab. After this period, removal of formwork for sections meeting the requirements for form removal of Standard Specifications Section 502, Structural Concrete, may proceed.
- At the Contractor's option, Precast Deck Panels may be used in place of the full depth cast-in-place deck slab, in accordance with Special Provisions Section 502, Structural Concrete - Precast Deck Panels, and in accordance with the Standard Details.
- Payment for reinforcing steel fabricated, delivered, and placed in the cast-in-place portion of the structural concrete slab will be considered incidental to the appropriate Standard Specifications Section 502 pay item. Payment for the stainless steel reinforcing in the curb shall be covered under Items 503.26 and 503.27.
- The seal(s) to be furnished shall have minimum Movement Rating(s) as follows:
 Pier No. 1 = 9/16 inch
 Pier No. 2 = 1/4 inch
- The Department shall review the seals prior to fabrication of the Expansion Device.
- The Contractor shall install Transition Barrier vertical closed stirrups, as shown in Standard Details Section 526, prior to the placement of the curb or sidewalk concrete. All reinforcing steel in the transition barrier shall be stainless steel.
- All cost related to the mortared chamfer on the approach slab will not be paid for directly but will be considered incidental to the related contract items.
- Heavy roofing felt on top of the backwall shall not be paid for directly. Payment shall be considered incidental to related contract items.
- Mechanical/Welded Splices shall not be paid for directly. Payment shall be considered incidental to the appropriate Standard Specification Section 502 pay item.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION		STP-2189(800)		BRIDGE NO. 6936 WIN 21898.00		BRIDGE PLANS	
WILSON STREAM BRIDGE WILSON STREAM FRANKLIN COUNTY		WILTON FRANKLIN COUNTY		SUPERSTRUCTURE		SHEET NUMBER	
PROJ. MANAGER	M. WIGHT	BY	D. BLIDEAU K. WOOD	DATE	6/2018 6/2018	SIGNATURE	
DESIGN-DETAILED	K. WOOD	CHECKED-REVIEWED	W. BROWN	DESIGN-DETAILED		P.E. NUMBER	
DESIGN-DETAILED		DESIGN-DETAILED		REVISIONS 1		DATE	
				REVISIONS 2			
				REVISIONS 3			
				REVISIONS 4			
				FIELD CHANGES			

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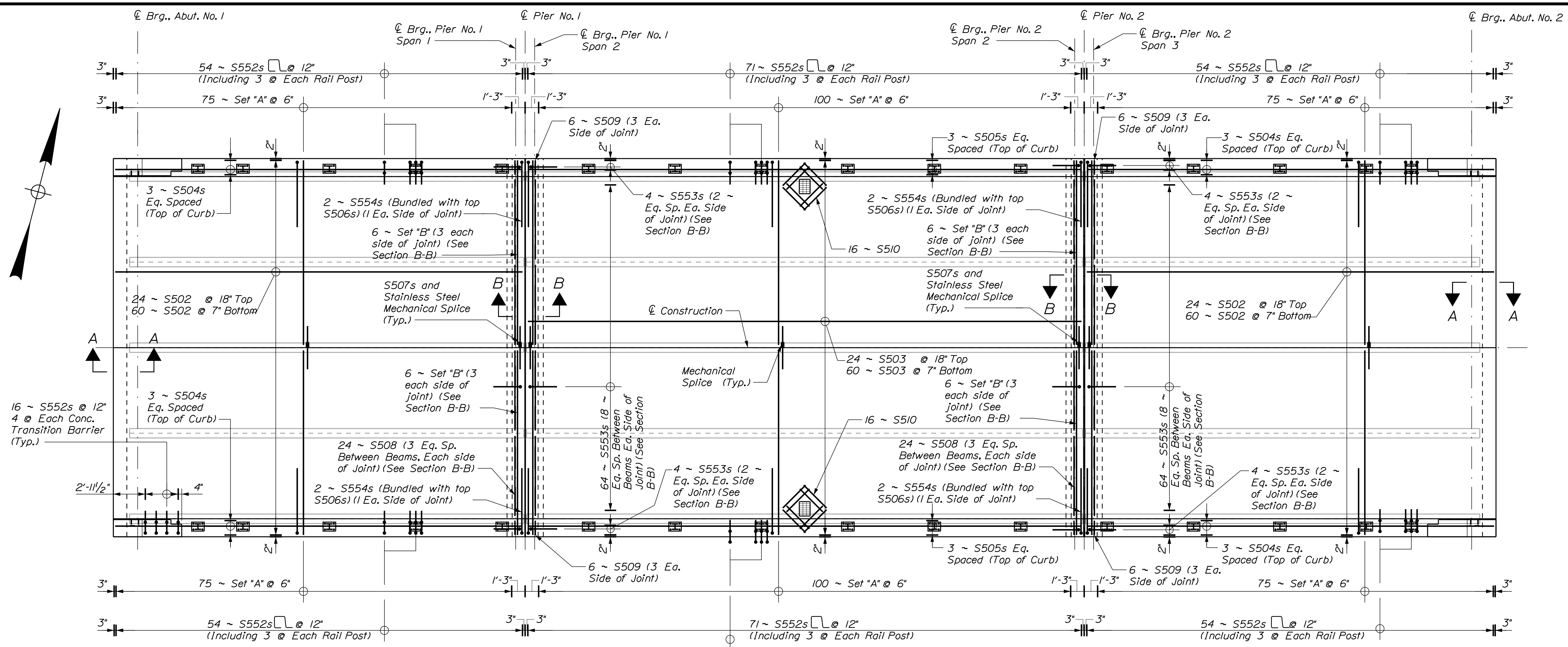
OF 15

Date: 6/25/2018

Username:

Division: BRIDGE

Filename: ... \013_Superstructure Rebar.dgn



SUPERSTRUCTURE REINFORCING PLAN

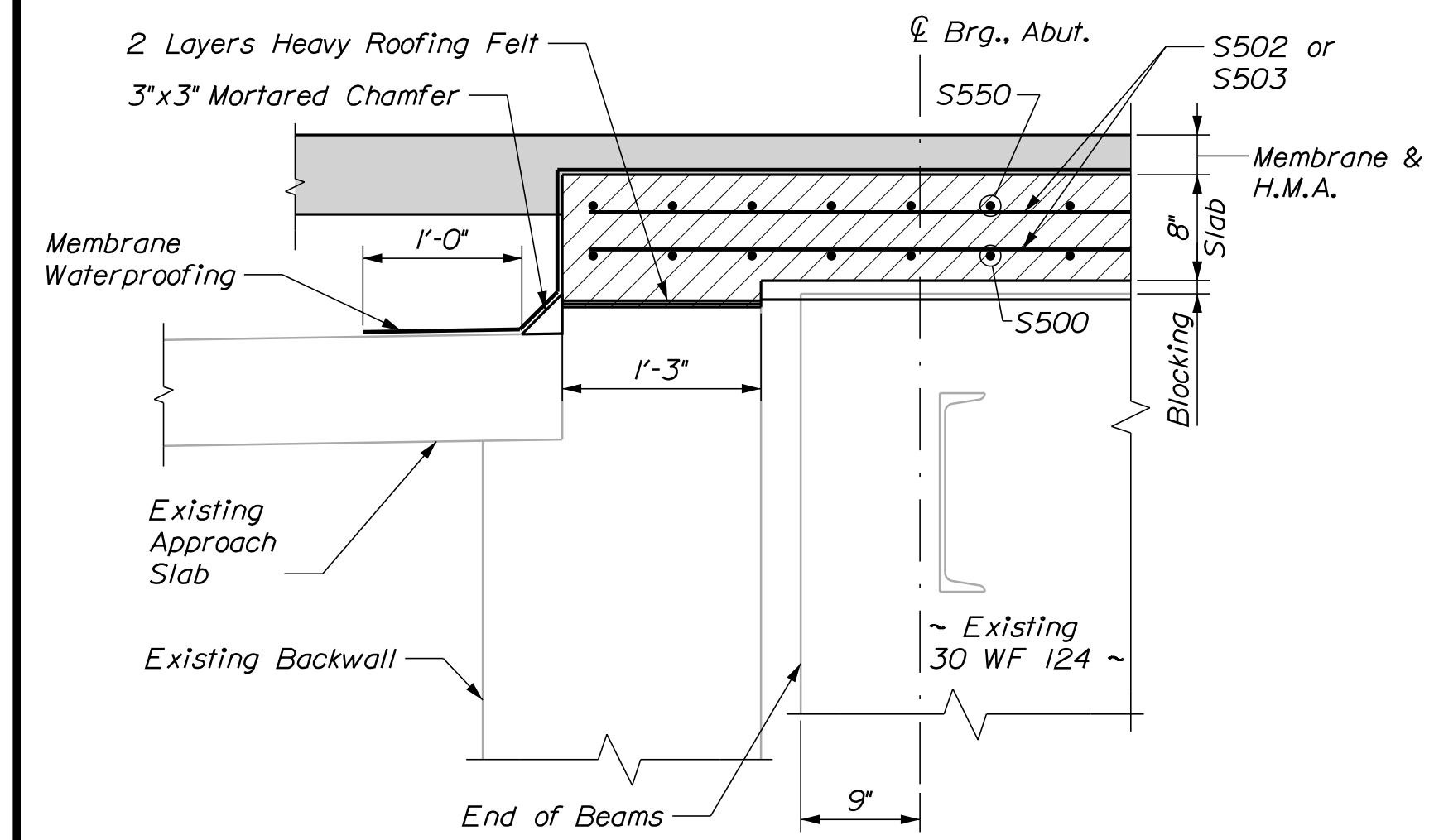
Set "A"

- 1 ~ S500
- 1 ~ S550
- 2 ~ S501
- 1 ~ S551
- 2 ~ Mechanical Splice *

Set "B"

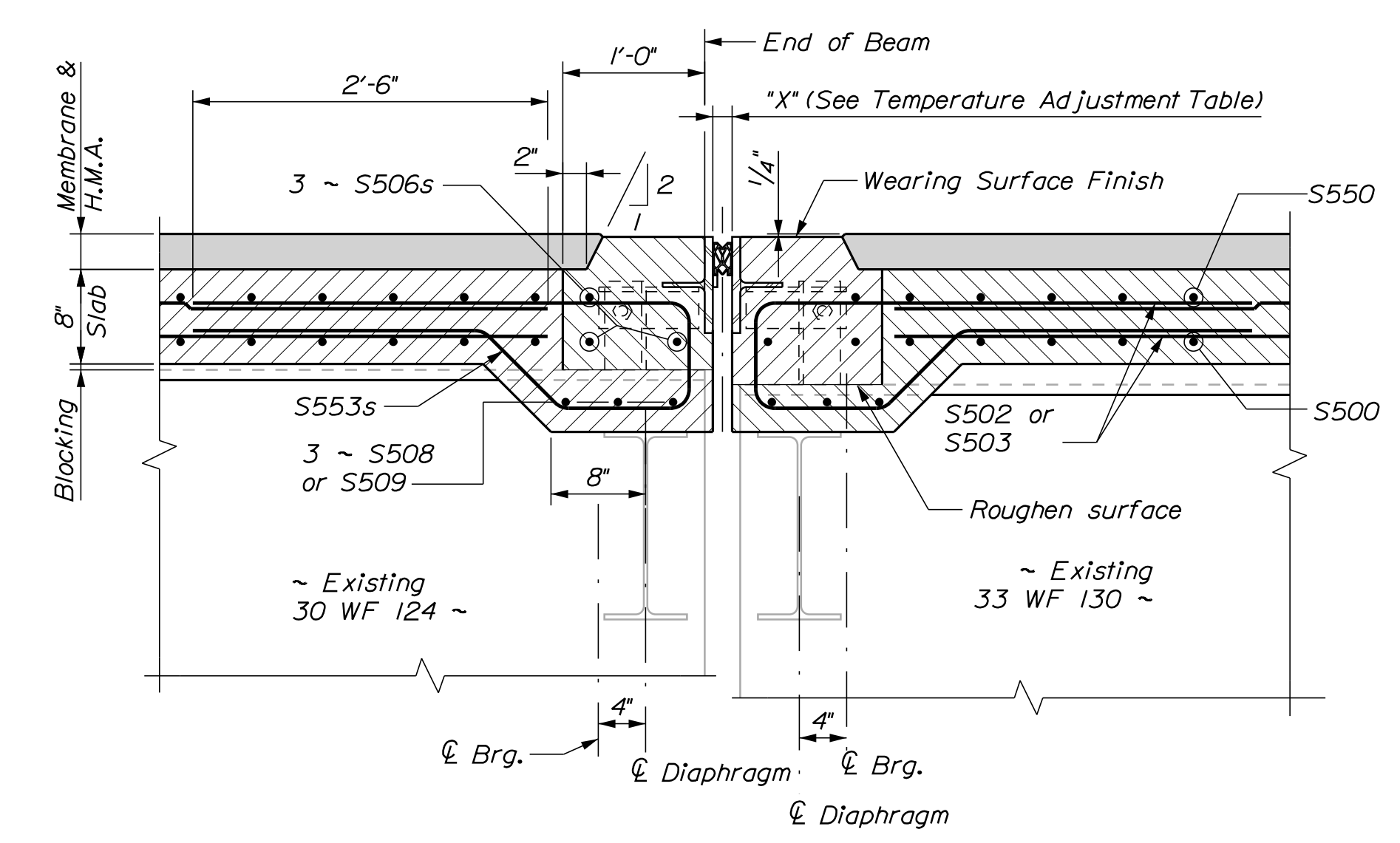
- 1 ~ S506s
- 1 ~ S507s
- 1 ~ Stainless Steel Mechanical Splice *

* Mechanical Splices are on North side only

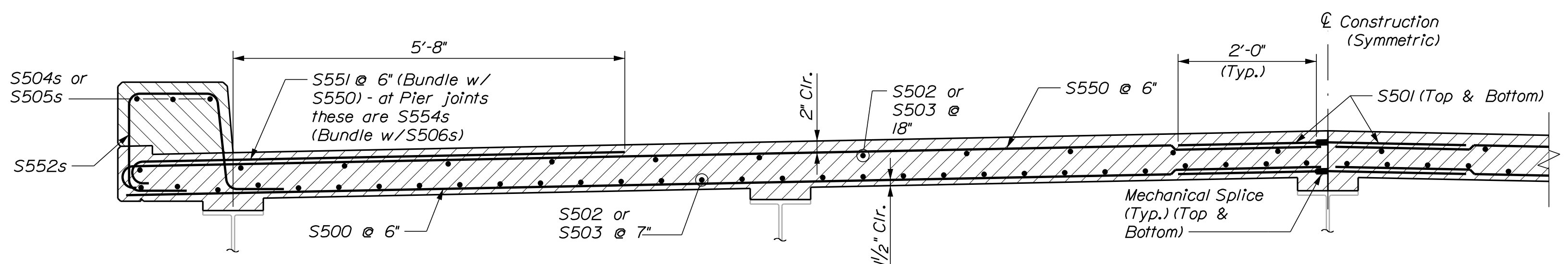


SECTION A-A

Temp. (°F)	Temperature Adjustment Table		
	"X" (in.) @ Pier 1 (CV1752/WA175)	"X" (in.) @ Pier 2 (CV3000)	"X" (in.) @ Pier 2 (WA350)
0	1.38	2.33	2.75
15	1.34	2.23	2.65
30	1.29	2.13	2.55
45	1.25	2.03	2.45
60	1.21	1.93	2.36
75	1.17	1.83	2.26
90	1.13	1.73	2.16



SECTION B-B



PART TRANSVERSE REINFORCING SECTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP-2189(800)
BRIDGE NO. 6936
WIN 21898.00
BRIDGE PLANS

PROJ. MANAGER	M. WIGHT	DATE	6/2018
DESIGN-DETAILED	K. WOOD	BY	D. BRIDGEMAN
CHECKED-REVIEWED	W. BROWN	DATE	6/2018
DESIGNS-DETAILED		SIGNATURE	
REVISIONS 1		P.E. NUMBER	
REVISIONS 2		DATE	
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

WILSON STREAM BRIDGE
WILSON STREAM
FRANKLIN COUNTY
WILTON
SUPERSTRUCTURE REINFORCING

SHEET NUMBER
13
OF 15

Date: 6/25/2018

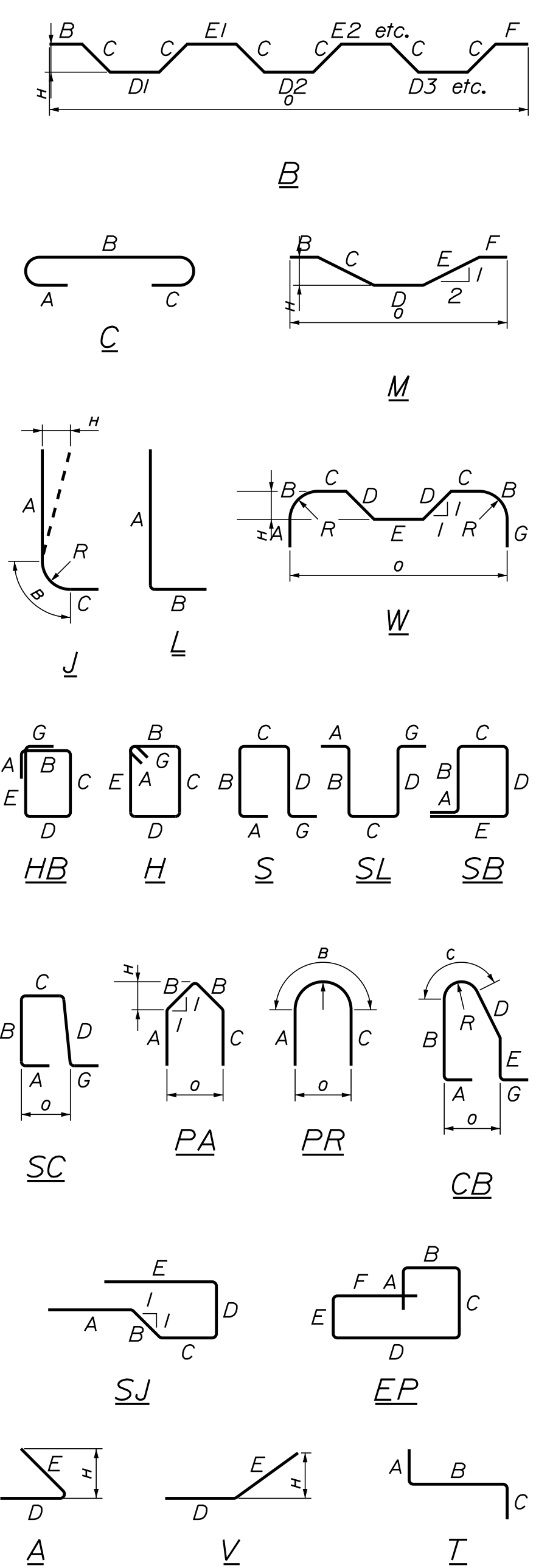
Username:

Division: BRIDGE

Filename: ... \BRIDGE\WSTA\014_Rebar.dgn

STRAIGHT BARS				BENT BARS																		
MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION
SUPERSTRUCTURE				SUPERSTRUCTURE																		
S500	500	17'-3"	Transverse Bottom	S550	500	17'-10"	C 7" 17'-3"															Transverse Top
S501	1000	2'-2"	Transverse Splice (See Note 2)	S551	500	7'-9"	C 7" 7'-2"															Transverse Top of Overhang
S502	168	36'-9"	Longitudinal (Spans 1 & 3)	S552s	374	5'-8 1/2"	SC 10" 1'-4 1/2"	1'-3"	1'-5"													Curbs
S503	84	49'-4"	Longitudinal (Span 2)	S553s	144	8'-0 1/2"	SJ 2'-2" 9/2"	9"	10"	3'-6"												End of Slab at Piers (see note 3)
S504s	12	37'-9"	Longitudinal Curbs (Spans 1 & 3)	S554s	8	7'-9"	C 7" 7'-2"															Transv. Top of Overhang Piers
S505s	6	51'-4"	Longitudinal Curbs (Span 2)																			
S506s	24	17'-3"	Blockouts at Piers																			
S507s	24	2'-2"	Splice at Piers (See Note 2)																			
S508	48	7'-7"	Between Beams at Piers																			
S509	24	1'-4"	Overhangs at Piers																			
S510	32	3'-0"	Bridge Drains																			

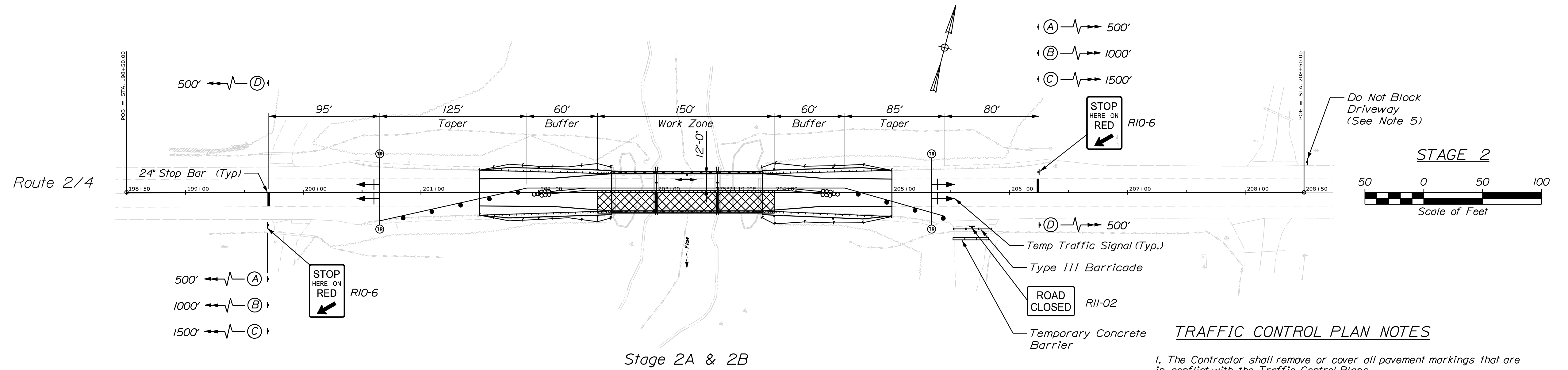
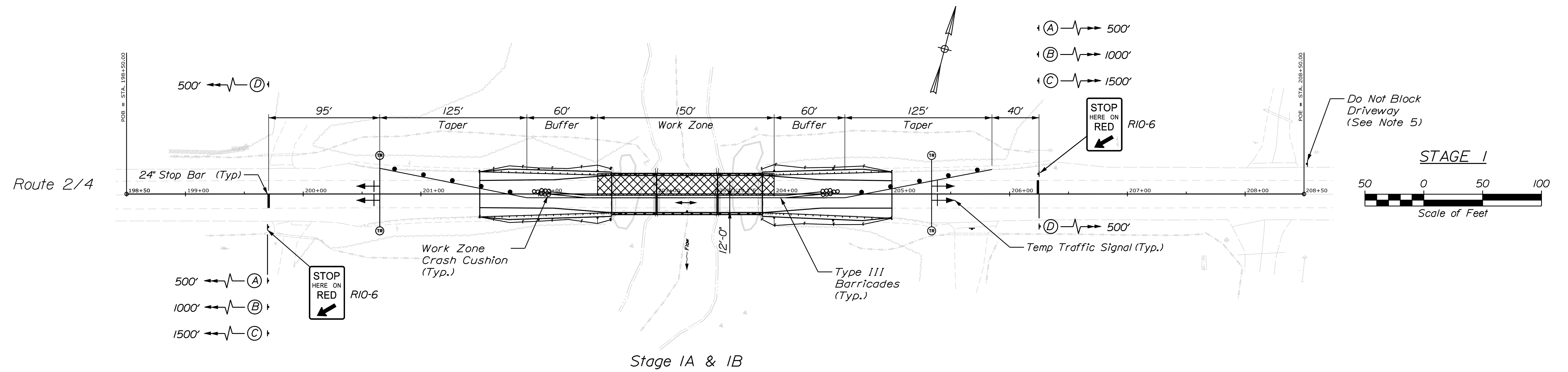
TYPE - BENDING DIAGRAMS



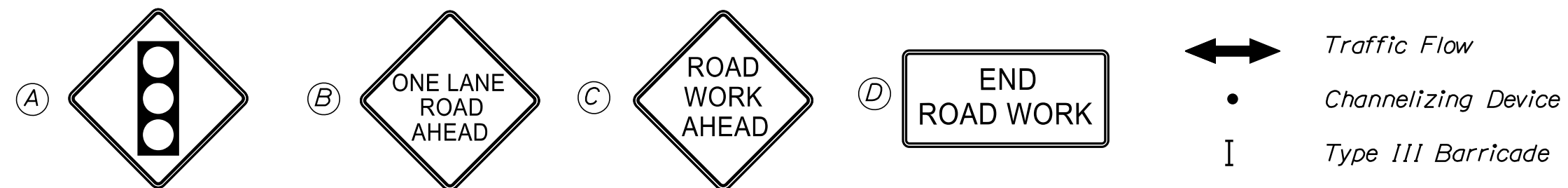
NOTES:
 1. Refer to MaineDOT Standard Details Section 526 for Transition Barrier Reinforcing Steel.
 2. Modify one end of bar per Mechanical Splice manufacturer's recommendations.
 3. Contractor shall field verify all dimensions of the bar for all spans prior to fabrication.
 All dimensions are out-to-out of bar.
 Bending details and hooks shall conform to the recommendations of the current revision of ACI Standard 315 and ACI Standard 318.
 Reinforcing Bar: ASTM A 615/A 615M, Grade 60

GENERAL NOTES
 1. The first two digits following the letter(s) of the mark indicate the size of the bar:
 Mark "A502" = bar size #5
 Mark "P805" = bar size #8
 Mark "S650" = bar size #6
 S554s: s = Stainless Steel
 2. Each crank bar, Type B, may be replaced by two (2) straight bars (one top and one bottom) of the same bar size as the crank bar. Payment in either case will be based on crank bars as scheduled on the plans.

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		STP-2189(800)		WIN		BRIDGE NO. 5936		BRIDGE PLANS	
WILSON STREAM BRIDGE		FRANKLIN COUNTY		REINFORCING		STEEL SCHEDULE		SHEET NUMBER		14	
WILSON STREAM		WILSON STREAM		REVISIONS 1		REVISIONS 2		REVISIONS 3		REVISIONS 4	
WILTON		WILTON		SIGNATURE		P.E. NUMBER		DATE		FIELD CHANGES	
PROJ. MANAGER		BY		DATE		DESIGN-DETAILED		CHECKED-REVIEWED		DESIGN-DETAILED	
K. WOOD		D. BLODEAU		6/2018		K. WOOD		K. WOOD		6/2018	



LEGEND



TRAFFIC CONTROL PLAN NOTES

- The Contractor shall remove or cover all pavement markings that are in conflict with the Traffic Control Plans.
- Upon completion of the work, existing traffic signs and pavement markings shall be reestablished to match the pre-construction conditions.
- The Contractor shall provide 4 message boards at the following locations:
 Intersection of Route 2 and Route 4 in Wilton
 Intersection of Route 2 and Route 156 in Wilton
 Intersection of Route 2 and Route 133 in Farmington
 Intersection of Route 2 and Route 27 in Farmington
 Final placement and wording of message boards to be as directed by the Resident.
- Traffic control plans shown above are a graphical representation of the traffic control plan. Final traffic control plan to be determined by the Contractor in accordance with Standard Specification 652.
- The Contractor shall provide R10-7 "Do Not Block Driveway" signs at all approach side driveways between Cemetery Road and Main Street.
- The Contractor shall provide R10-7 "Do Not Block Intersection" signs at the intersection of Route 2/4 and Cemetery Road and the intersection of Route 2/4 and Main Street.
- The Contractor shall provide signs noting low bridge on Cemetery Road. Signs shall be placed at the intersection of Route 2/4 and Cemetery Road and the intersection of Route 2/4 and Main Street.
- The temporary stop bar shall be made of a material easily removed from the pavement surface without grinding. Payment for the stop bars will be made under Item 627.78 - Temporary Pavement Marking Line, White or Yellow.
- Contractor shall provide two wide load restriction signs as per Special Provision 652.

PROJ. MANAGER	M. WIGHT	BY	DATE
DESIGN-DETAILED	I. WOLFFEL	I. WOLFFEL	6/2018
CHECKED-REVIEWED	W. BROWN	K. WOOD	6/2018
DESIGN-DETAILED			SIGNATURE
REVISIONS 1			P.E. NUMBER
REVISIONS 2			DATE
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			